DATA SHEET

Analog and Digital Console Switches

Generation of s2/s3 series – software and platform-independent

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Introduction

The console switches (Keyboard Video Mouse = KVM) from Fujitsu Technology Solutions are vital in the operation of cluster configurations and server farms in data centers. They offer a cost-optimized, platform and software-independent solution for rack system integration. Both PS/2 and USB interfaces from servers are supported, resulting in possible mixed configurations with different Fujitsu servers in one rack.

KVM console switches S2 and S3

The Enterprise Server S2 / S3 console switches provide a solution positioned between simple mechanical and high-end digital console switches for rack integration. With the S2 / S3 series a maximum of 16 servers can be operated in a rack with up to two consoles in non-blocking mode, locally or with one / two consoles in an IP connection (10/100/1000 Mbit/s) depending on the switch model. In blocking mode (with cascaded switches) up to 256 servers are even possible. Blade Servers from Fujitsu are supported in the same way.
The Enterprise Server S2 / S3 console switches are multi-platform switches and only require a single height unit. They are also DDC2B compatible.
The Enterprise Server S2 / S3 console switches are primarily designed for integration into 19-inch racks. They round off the 19-inch technology portfolio of Fujitsu servers and are indispensable for the operation of cluster configurations and server farms in data centers. The cost benefits (cutting back on monitors and keyboards that are otherwise needed) are obvious.
It is planned to combine S2 / S3 switches with other Fujitsu console switches.

Highlights

4/8- and 16-port switch for system consoles that can be configured to provide connections for up to two local users for analog switches or for one or two remote users plus one local user for digital switches.
End-to-end CAT5 connections, firmware flash-upgradability and keep-alive function are provided.
Advanced on-screen management for configuration/server selection, client-based GUI for remote access and improved graphics (16-bit).
Virtual Media (VM) and LDAP support for KVM S3 switches.
Password protection and remote access secured by SSL encryption.

Main features	Benefits
■ Access via remote IP or locally	■ More flexible access: one and two local consoles respectively or one local and one or two remote consoles (via IP)
■ Advanced on-screen management for configuration and server selection	■ Direct access for administrators or rack users via local console
■ Service friendliness	■ LDAP support for KVM S3 switches, centrally administrable user management
■ Can be combined with existing console switches from Fujitsu	■ Investment protection and seamless extension of existing installations
■ Access protection	■ Password protection and various levels of access control ■ Remote access secured by SSL encryption
■ PS/2, USB (1.1 and 2.0) or SUN I/O interface	■ Multi-platform compliant and therefore independence from the type of connected server

TECHNICAL DETAILS

KVM S2-0411 DIGITAL

Installation format:	Rack-optimized, 1U
Number of ports:	4
Console connections:	One local console, one remote-console via TCP/IP (10/100/1000MBit/s auto-sense)
Supported displays:	Monitor: VGA, SVGA (XGA, XGA-II with adapter) Local port: up to 1600 x 1280 @75Hz Remote-Port: up to 1280X1024, 75Hz
Supported keyboards:	USB and PS/2 keyboards; RC22 / RC23
Supported mouse systems:	USB and PS/2 mouse, MS Intelli- mouse, RC22 and RC23
Server selection:	By Advanced On-Screen Management (OSD)
Configuration:	By Advanced On-Screen Management (OSD)
OSD languages:	US English, German, French, Spanish, Italian and Japanese
Remote access:	Via KVM **S3** client SW or onboard WEB interface (OBWI)
KVM S3 Client SW	Windows, Linux, Solaris
Browser support (OBWI)	Microsoft (IE6, IE7), Firefox 2.0 Netscape 7.0
Client SW languages	US English, German, French, Spanish, Italian and Japanese
Color coding:	VGA and PS/2 according to PC99
Dimension (H x W x D)	4.45 x 43.18 x 20.50 cm (1.72 x 17.00 x 8,075 in)
Weight	2.4 kg without cable
Rated voltage	100-240 VAC, 50-60 Hz
Max. effective power	25 W

KVM S3-1621 DIGITAL

Installation format:	Rack-optimized, 1U
Number of ports:	16
Console connections:	One local console, two remote consoles via TCP/IP (10/100/1000MBit/s auto sense)
Supported displays:	Monitor: VGA, SVGA (XGA, XGA-II with adapter) Local port: up to 1600 x 1280 @75Hz Remote-Port: up to 1280X1024, 75Hz
Supported keyboards:	USB and PS/2 keyboards; RC22 / RC23
Supported mouse systems:	USB and PS/2 mouse, MS IntelliMouse; RC22 / RC23
Server selection:	By Advanced On-Screen Management (OSD)
Configuration:	By Advanced On-Screen Management (OSD)
OSD languages:	US English, German, French, Spanish, Italian and Japanese
Remote access:	Via KVM S3 client software or onboard WEB interface (OBWI)
KVM S3 Client SW	Windows, Linux, Solaris
Browser support (OBWI)	Microsoft (IE6, IE7), Firefox 2.0, Netscape 7.0
Client software languages:	US English, German, French, Spanish, Italian and Japanese
Virtual Media Support	All with PRIMERGY servers released USB 2.0 devices, inclusive boot via USB 2.0 (if supported by server BIOS). Only in connection with KVM s3-adapter USB2
Released Server for Virtual Media via USB2.0	Servers BIOS has to support “Composite USB2.0” in boot phase. At the moment following servers will not support this feature: PRIMERGY TX150S4; RX200S3; RX300S3; RX800S2; as well as all PRIMEPOWER Servers
Color coding:	VGA and PS/2 according to PC99
Dimension (H x W x D)	4.37 x 43.18 x 27.98 cm (1.72 x 17.00 x 10.89 in)
Weight	3.31 kg without cable
Rated voltage	100-240 VAC, 50-60 Hz
Max. effective power	40 W

TECHNICAL DETAILS

KVM S2-1602 ANALOG

Installation format:	Rack-optimized, 1U
Number of ports:	16
Console connections:	Two local consoles
Supported displays:	XGA, VGA, up to 1280 x 1024 pixels, max. 75 Hz
Supported keyboards:	All PS/2 keyboards
Supported mouse systems:	PS/2 mouse, Microsoft Explorer mouse, Microsoft IntelliMouse family, IBM Scrollpoint, Logitech Mouseman Wheel, Logitech Trackman Marble Wheel, Logitech Marble FX and Kensington 4 button mouse
Server selection:	By Advanced On-Screen Management (OSD)
Configuration:	By Advanced On-Screen Management (OSD)
OSD languages:	US English, German, French, Spanish, Italian and Japanese
Color coding:	VGA and PS/2 according to PC99
Dimension (H x W x D)	4.32 x 43.18 x 16.51 cm (1.70 x 17.00 x 6.50 in)
Weight	3.6 kg without cable
Rated voltage	100-240 VAC, 50-60 Hz
Max. effective power	40 W

KVM S2-0801 ANALOG

Installation format:	Rack-optimized, 1U
Number of ports:	8
Console connections:	One local console
Supported displays:	XGA, VGA, up to 1280 x 1024 pixels, max. 75 Hz
Supported keyboards:	All PS/2 keyboards
Supported mouse systems:	PS/2 mouse, Microsoft Explorer mouse, Microsoft IntelliMouse family, IBM Scrollpoint, Logitech Mouseman Wheel, Logitech Trackman Marble Wheel, Logitech Marble FX and Kensington 4 button mouse
Server selection:	By Advanced On-Screen Management (OSD)
Configuration:	By Advanced On-Screen Management (OSD)
OSD languages:	US English, German, French, Spanish, Italian and Japanese
Color coding:	VGA and PS/2 according to PC99
Dimension (H x W x D)	4.32 x 43.18 x 16.51 cm (1.70 x 17.00 x 6.50 in)
Weight	3.6 kg without cable
Rated voltage	100-240 VAC, 50-60 Hz
Max. effective power	40 W

TECHNICAL DETAILS

ACCESSORIES

KVM S2-Adapter 1 x USB + 1 x VGA

KVM S3-Adapter 1 x USB 2.0 + 1 x VGA (for virtual media support)

KVM S2-Adapter 2 x PS/2 + 1 x VGA

CABLING

UTP CAT5 cable blue (2 x RJ45): 2m, 5m and 10m, as well as customized length for ex works installation

CASCADING

KVM Sx-1611/1621/0411 on top of KVM S2-1602/-0801

KVM S2-1602 on KVM S2-1602/-0801

KVM Sx-1611/1621/0411 on ES+ (KS04/08)

KVM S2-1602 / KVM S2-0801 on ES+ (KS04/08)

All analogue KVM S2 switches have a special (ARI) port that is connected to the input of the "master" switch via a CAT5 cable. The cascading protocol runs via this "ARI" port and the "slave" switch is automatically detected and integrated. In remote mode (KVM via IP) a digital switch should always be selected as the "master" switch. The local console is also connected to this switch.

COMPLIANCE WITH NORMS AND STANDARDS

Electromagnetic compatibility	
Europe	EN55024, EN61000-3-3 EN55022 Class A
Japan	VCCI Class B
USA/Canada	FCC Class B

Product safety	
Global	IEC950
Europe	EN 60950
USA/Canada	UL / CSA 60950

There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons (e.g. for Canada and USA, East European countries, Norway) can be applied for on request.

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